DOCUMENT RESUME

ED 104 881 SP 009 124

AUTHOR Flanders, Ned A.
TITLE Research on Teaching as Human Interaction.
PUB DATE Apr 75
NOTE 7p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, D.C., April 1975)

EDRS PRICE MF-$0.76 HC-$1.58 PLUS POSTAGE
DESCRIPTORS *Educational Research; Effective Teaching; Feedback; *Interaction; Interaction Process Analysis; *Student Teacher Relationship; *Teacher Education; *Teacher Motivation

ABSTRACT

This report summarizes recommendations of a panel studying research on teaching as human interaction. Recommendations were classified into three approaches to the study of teaching which dealt with a) teacher-student interaction, b) teacher education, and c) special research problems. Two facets of research were considered to have high priority: understanding the relationships between teacher-pupil interaction and the effects of this interaction on pupils, and understanding the capacity of motivated adults to receive feedback information while interacting with pupils. (MJM)

ED104881

RESEARCH ON TEACHING AS HUMAN INTERACTION

Ned A. Flanders

Chairperson, Panel 2

Far West Laboratory

(This paper was prepared for the AERA Annual Meeting, April, 1975, Session 5:03, NIE Planning Conference on Studies in Teaching: Studying Teaching Skills, Symposium, Division C.)

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Introduction

Panel 2 made the immodest assumption that the best approach to the study of teaching is to analyze the interaction between teachers and students and among students. One justification of this approach is that all knowledge of teaching that has utility will appear, in one form or another, within the interchange when teachers and students contact each other. Thus, the concern of Panel 2 began with the study of interaction itself and expanded to include relationships between interaction variables and learning outcomes, student characteristics, characteristics of the instructional setting, teacher characteristics, teacher planning, and teacher education and training.

Our Panel was convened to answer the question, "What is the most important research that now needs to be done in the study of teaching?" Twelve of us, in one room, working a four and one-half day week, were to answer this question. Most of us were reasonably independent researchers with sufficient published research to be invited. None of us so far as I can tell, had ever suffered for a prolonged period of time, from serious attacks of modesty or self-deprocation. None of us was inarticulate or

SP009 134

or excessively taciturn. As a result, it should come as no surprise that instantaneous agreement on research priorities failed to materialize on the first day, nor on the second day, and when coaxed, agreement might appear only as a trace on the third day. Nevertheless, we did succeed in producing a report and in it each Panel member can see at least some of his own ideas.

This report of the Panel deliberations will be divided into two parts: first, I will summarize our recommendations; and second, I will summarize side issues that to me seemed equally important.

Panel Recommendations

The Panel 2 recommendations are classified into three approaches to the study of teaching. The first approach dealt with teacher-student interaction. Five programs were set forth. The first dealt with the study of interaction in itself -- the dimensions along which it should be described and the kinds of descriptions that should be made. The second emphasized educational settings and student characteristics in their relationship to interaction processes. The third emphasized the study of teacher characteristics, plans, and perceptions of students in relation to interaction processes. The fourth laid out studies of the ways in which interaction processes are related to the educational growth of students. The fifth dealt with studies in which the whole complex of interdependent variables involved in teacher-student interaction would be studied in multi-faceted designs.

The second approach of the panel was concerned with teacher education. Here, three programs were set forth. The first dealt with the ways in which teachers think about interaction, their own participation, and the ways

in which they decide to participate. The second was concerned with the capacity of a motivated adult to receive and use feedback while interacting with students. The third was concerned with computer-assisted systems of teacher education -- their design, development, and evaluation.

The third approach was concerned with the special difficulties of research on teaching as human interaction. The Panel recommended special efforts to develop first, additional measures of the outcomes of teaching and learning, second, mathematical models for dealing with chains of events in classroom interaction, and third a position paper on the unit of sampling, units of behavior, and similar problems in this research area. The need for replication of findings was emphasized, along with the need for long-range, coordinated programs which make use of laboratory and field studies. In addition, the Panel recommended the establishment of various kinds of data banks that would facilitate comparison of different systems of interactive analysis on the same data, comparisons of various sets of predictive variables, and the creation of samples large enough to make possible the cross-validation of results.

Finally, the Panel emphasized the need for taking into account the ways in which teachers will adapt research-based knowledge and teaching skills to their own classrooms, students, and styles. Such adaptations will determine the validity and utility of the knowledge to be derived from research on teaching as human interaction.

Out of this total organization two programs of research were voted to the rank of highest priority in a kind of popularity contest after a preliminary draft of the report had been finished. The first of the two highest priorities was understanding relationships between teacher-pupil

interaction and the effects of this interaction on pupils. This is the classic process-product research, but interestingly enough, the greater emphasis was not on measuring process variables of interaction, but on the product variables. Special mention was given to the problem of developing better methods of conceptualizing and measuring the effects of learning on pupils. The speed with which the Panel members moved beyond the currently mis-used nationally standardized tests of achievement toward imaginative measures of learning outcomes certainly showed their distrust of the more common measures of subject matter achievement. Apparently this insight had been gained by members of the Panel years earlier.

The second of the two highest priorities went to the field of teacher education and for studies to investigate the capacity of a motivated adult to receive feedback information while interacting with pupils. In particular, special experimentation with different kinds of feedback languages which can be comprehended by an adult while actually teaching appeared to be a form of basic research urgently needed. Experimentation with different feedback languages with different sources of the messages, and with the timing, frequency, and intensity of messages were cited in the report.

Side Issues

Equally important, if not more important than topics of research, were a number of side issues. The first of these was the point of view expressed by one Panel member when he said, "The way to improve research on teaching is not to decide what should be investigated, instead we should set standards of how research is to be conducted." It is from this observation that a reader can find a number of suggestions about research methods even though there was another panel that dealt with this topic at the conference.

Another side issue was a discussion of "the validity problem". One panel member was dissatisfied with what might be called an over emphasis of probability models for testing null hypotheses, the indiscriminate use of models for research borrowed from other sciences, and the notion that research on teaching may need to develop its own model of research. The validity problem refers to the notion that the validity of research on teaching must ultimately be based on the teacher's use of this knowledge and the effects of its use on learning outcomes. In other words, besides asking whether one's results could occur by chance, the researcher who investigates teaching must also ask whether his findings can be successfully adapted by teachers and put to work for the improvement of education.

A third side issue was concerned with the lack of communication among those who conduct research on teaching, the lack of a journal specifically concerned with this kind of research, and the lack of a special ERIC Clearing House for research on teaching.

Readers who have progressed this far and are still interested in the study of teaching as human interaction should read the full report of Panel 2.

Reference

Teaching as human interaction: National conference on studies in teaching. Report of Panel 2, National Institute of Education, Department of HEW. Washington, D.C., December, 1974.